

INHERENTLY ELECTROSTATIC DISSIPATING
BLOCK COPOLYMER COMPOSITIONS

ABSTRACT

5 An acid end-capped, linear inherently electrostatic dissipating block
copolymer (acid end-capped IDP) composition has from about 95 to about
99.99 weight percent of an linear inherently electrostatic dissipating block
copolymer (IDP) and from about 0.01 to about 5 weight percent of an acid
end-capping reagent having an acid functionality of at least two. The linear
IDP has from about 5 to about 85 weight percent of a soft segment of a
10 polyalkylene glycol and from about 15 to about 95 weight percent of a hard
segment. The hard segment is derived from a polymer having a glass
transition temperature or crystalline melting temperature greater than
ambient temperature and being reactive with a hydroxyl functionality. After
formation of the IDP, the IDP is subsequently modified with the acid end-
15 capping reagent to form the acid end-capped IDP composition. The acid
end-capped IDP compositions may be added to thermoplastic base
materials to form an alloy. Processes for preparing the acid end-capped
linear IDP compositions and the alloys are provided.